

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/042425 A1

(51) International Patent Classification⁷: **G01V 1/18**,
G10K 9/12, G01H 9/00

Technology Centre Winfrith Newburgh, Dorchester Dorset DT2 8XJ (GB). **NASH, Philip, John** [GB/GB]; Qinetiq Limited, Winfrith Technology Centre Winfrith Newburgh, Dorchester Dorset DT2 8XJ (GB).

(21) International Application Number:
PCT/GB2003/004741

(74) Agent: **RICHARDSON, Mark**; IP QinetiQ Formalities, Cody Technology Park, A4 Building, Room G016, Ively Road, Farnborough, Hampshire GU14 0LX (GB).

(22) International Filing Date:
4 November 2003 (04.11.2003)

(25) Filing Language: English

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:
0226162.6 8 November 2002 (08.11.2002) GB

(71) Applicant (*for all designated States except US*): **QINETIQ LIMITED** [GB/GB]; 85 Buckingham Gate, London SW1E 6PD (GB).

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **CRICKMORE, Roger, Ian** [GB/GB]; Qinetiq Limited, Winfrith Technology Centre Winfrith Newburgh, Dorchester Dorset DT2 8XJ (GB). **THOMAS, Sean, Dormer** [GB/GB]; Qinetiq Limited, Winfrith Technology Centre Winfrith Newburgh, Dorchester Dorset DT2 8XJ (GB). **TANNER, Simon** [GB/GB]; Qinetiq Limited, Winfrith Technology Centre Winfrith Newburgh, Dorchester Dorset DT2 8XJ (GB). **HILL, David, John** [GB/GB]; Qinetiq Limited, Winfrith

Declaration under Rule 4.17:

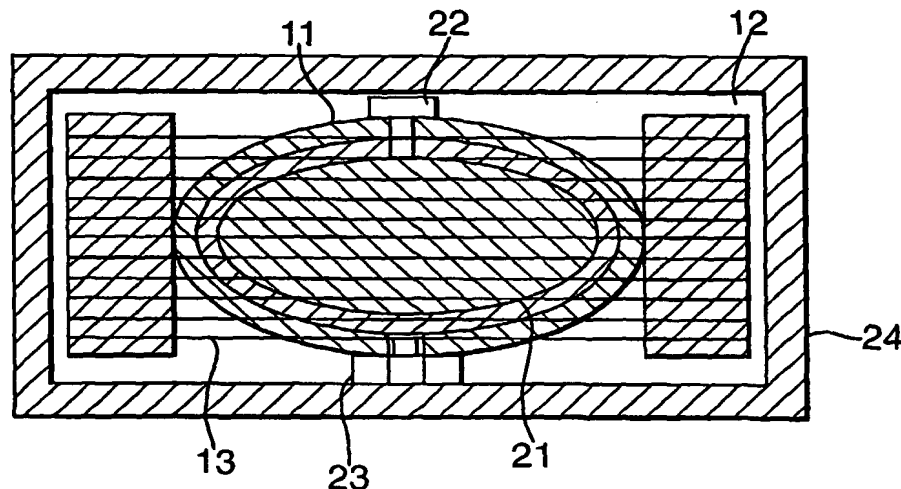
— of inventorship (Rule 4.17(iv)) *for US only*

Published:

— with international search report

[Continued on next page]

(54) Title: FLEXTENSIONAL VIBRATION SENSOR



(57) Abstract: A vibration sensing device, package and system and a method of manufacturing a vibration sensing device are disclosed. The vibration sensing device comprises a body (11) whose geometry is such that it exhibits flextensional properties.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.